

## Search Plan and Results

### Question

In adults, what is the relationship between the intake of vegetables and fruits, not including juice, and cardiovascular disease? (DGAC 2010)

In adults, what is the relationship between the intake of vegetables and fruits, not including juice, and body weight? (DGAC 2010)

In adults, what is the relationship between the intake of vegetables and fruits, not including juice, and type 2 diabetes? (DGAC 2010)

### Date Searched

7/23/09

### Inclusion Criteria

- June 2004 to July 2009
- Human subjects
- English language
- International
- *Sample size:* Minimum of 10 subjects per study arm; preference for larger sizes, if available
- *Dropout rate:* Less than 20%; preference for smaller dropout rates
- *Ages:* Adults 19 years and older
- *Populations:* Healthy and those with elevated chronic disease risk.

### Exclusion Criteria

- Studies that only consider cancer outcomes
- Studies that considered vegetables and fruits as part of a larger dietary pattern
- Medical treatment/therapy
- Diseased subjects (already diagnosed with disease related to study purpose)
- Hospitalized patients
- Study population not from a developed country as defined by the Human Development Index (<http://hdr.undp.org/en/statistics/>)
- Animal studies
- In vitro studies
- Articles not peer reviewed (websites, magazine articles, Federal reports, etc.).

### Search Terms: Search Vocabulary

("Fruit"[majr>NoExp] OR fruit OR "Vegetables"[majr]) AND ("Adiposity"[majr] OR "Overweight"[majr] OR "Obesity"[majr] OR "Weight Gain"[majr] OR "Body Weights and Measures"[Majr] OR "body mass index"[majr] OR "body composition"[majr] OR "energy intake"[majr] OR caloric intake\*)

("Fruit"[majr>NoExp] OR "Vegetables"[majr]) AND ("Diabetes Mellitus, Type 2"[majr] OR "metabolic syndrome X"[majr] OR "hypertension"[majr] OR "dyslipidemias"[MeSH Terms] OR "cardiovascular diseases"[majr] OR "heart diseases"[majr] OR "chronic disease"[mh] OR "Neoplasms"[majr])

## Electronic Databases

PubMed

**Total hits from all electronic database searches: 626**

**Total articles identified to review from electronic databases: 143**

Articles Identified Via Handsearch or Other Means

### **Hand Search (One Article)**

Wang YF, Yancy WS Jr, Yu D, Champagne C, Appel LJ, Lin PH. [The relationship between dietary protein intake and blood pressure: Results from the PREMIER study](#). *J Hum Hypertens.* 2008 Nov; 22 (11): 745-754. Epub 2008 Jun 26. PMID: 18580887.

---

Summary of Articles Identified to Review

**Number of Primary Articles Identified: 29**

**Number of Review Articles Identified: 4**

**Total Number of Articles Identified: 33**

**Number of Articles Reviewed but Excluded: 111**

---

List of Articles Included for Evidence Analysis

**In adults, what is the relationship between the intake of vegetables and fruits, not including juice and cardiovascular disease?**

## Systematic Reviews/Meta-analyses

Dauchet L, Amouyel P, Hercberg S, Dallongeville J. [Fruit and vegetable consumption and risk of coronary heart disease: a meta-analysis of cohort studies](#). *J Nutr.* 2006 Oct; 136 (10): 2, 588-2, 593. PMID: 16988131.

Dauchet L, Amouyel P, Dallongeville J. [Fruit and vegetable consumption and risk of stroke: A meta-analysis of cohort studies](#). *Neurology.* 2005 Oct 25; 65 (8): 1, 193-1, 197. PMID: 16247045.

He FJ, Nowson CA, Lucas M, MacGregor GA. [Increased consumption of fruit and vegetables is related to a reduced risk of coronary heart disease: Meta-analysis of cohort studies](#). *J Hum Hypertens.* 2007 Sep; 21 (9): 717-728. Epub 2007 Apr 19. PMID: 17443205.

He FJ, Nowson CA, MacGregor GA. [Fruit and vegetable consumption and stroke: Meta-analysis of cohort studies](#). *Lancet.* 2006 Jan 28; 367 (9507): 320-326. Review. PMID: 16443039.

## Primary Citations

Galeone C, Tavani A, Pelucchi C, Negri E, La Vecchia C. [Allium vegetable intake and risk of acute myocardial infarction in Italy](#). *Eur J Nutr.* 2009 Mar; 48 (2): 120-123. Epub 2009 Jan 13. PMID: 19142565.

Genkinger JM, Platz EA, Hoffman SC, Comstock GW, Helzlsouer KJ. [Fruit, vegetable and antioxidant intake and all-cause, cancer and cardiovascular disease mortality in a community-dwelling population in Washington County, Maryland](#). *Am J Epidemiol.* 2004 Dec 15; 160 (12): 1, 223-1, 233. PMID: 15583375.

Hung HC, Joshipura KJ, Jiang R, Hu FB, Hunter D, Smith-Warner SA, Colditz GA, Rosner B, Spiegelman D, Willett WC. [Fruit and vegetable intake and risk of major chronic disease](#). *J Natl Cancer Inst.* 2004 Nov 3; 96 (21): 1, 577-1, 584. PMID: 15523086.

Joshipura KJ, Hung HC, Li TY, Hu FB, Rimm EB, Stampfer MJ, Colditz G, Willett WC. [Intakes of fruits, vegetables and carbohydrate and the risk of CVD](#). *Public Health Nutr.* 2009 Jan; 12 (1): 115-121. Epub 2008 Apr 15. PMID: 18410704.

Nakamura K, Nagata C, Oba S, Takatsuka N, Shimizu H. [Fruit and vegetable intake and mortality from cardiovascular disease are inversely associated in Japanese women but not in men](#). *J Nutr.* 2008 Jun; 138 (6): 1, 129-1, 134. PMID: 18492845.

Nikolic M, Nikic D, Petrovic B. [Fruit and vegetable intake and the risk for developing coronary heart disease](#). *Cent Eur J Public Health.* 2008 Mar; 16 (1): 17-20. PMID: 18459474.

Takachi R, Inoue M, Ishihara J, Kurahashi N, Iwasaki M, Sasazuki S, Iso H, Tsubono Y, Tsugane S; JPHC Study Group. [Fruit and vegetable intake and risk of total cancer and cardiovascular disease: Japan Public Health Center-Based Prospective Study](#). *Am J Epidemiol.* 2008 Jan 1; 167 (1): 59-70. Epub 2007 Oct 10. PMID: 17928402.

Tucker KL, Hallfrisch J, Qiao N, Muller D, Andres R, Fleg JL; Baltimore Longitudinal Study of Aging. [The combination of high fruit and vegetable and low saturated fat intakes is more protective against mortality in aging men than is either alone: The Baltimore Longitudinal Study of Aging](#). *J Nutr.* 2005 Mar; 135 (3): 556-561. PMID: 15735093.

## Blood Pressure/Hypertension

Mirmiran P, Noori N, Zavareh MB, Azizi F. [Fruit and vegetable consumption and risk factors for cardiovascular disease](#). *Metabolism*. 2009 Apr; 58 (4): 460-468. PMID: 19303965.

Nuñez-Cordoba JM, Alonso A, Beunza JJ, Palma S, Gomez-Gracia E, Martinez-Gonzalez MA. [Role of vegetables and fruits in Mediterranean diets to prevent hypertension](#). *Eur J Clin Nutr*. 2009 May; 63 (5): 605-612. Epub 2008 Feb 27. PMID: 18301434.

Radhika G, Sudha V, Mohan Sathya R, Ganesan A, Mohan V. [Association of fruit and vegetable intake with cardiovascular risk factors in urban south Indians](#). *Br J Nutr*. 2008 Feb; 99 (2): 398-405. Epub 2007 Aug 3. PMID: 17678569.

Utsugi MT, Ohkubo T, Kikuya M, Kurimoto A, Sato RI, Suzuki K, Metoki H, Hara A, Tsubono Y, Imai Y. [Fruit and vegetable consumption and the risk of hypertension determined by self measurement of blood pressure at home: The Ohasama study](#). *Hypertens Res*. 2008 Jul; 31 (7): 1, 435-1, 443. PMID: 18957815.

Wang YF, Yancy WS Jr, Yu D, Champagne C, Appel LJ, Lin PH. [The relationship between dietary protein intake and blood pressure: Results from the PREMIER study](#). *J Hum Hypertens*. 2008 Nov; 22 (11): 745-754. Epub 2008 Jun 26. PMID: 18580887. (Hand search)

## Blood Lipids

Kelley DS, Rasooly R, Jacob RA, Kader AA, Mackey BE. [Consumption of Bing sweet cherries lowers circulating concentrations of inflammation markers in healthy men and women](#). *J Nutr*. 2006 Apr; 136 (4): 981-986. PMID: 16549461.

Mirmiran P, Noori N, Zavareh MB, Azizi F. [Fruit and vegetable consumption and risk factors for cardiovascular disease](#). *Metabolism*. 2009 Apr; 58 (4): 460-468. PMID: 19303965.

Radhika G, Sudha V, Mohan Sathya R, Ganesan A, Mohan V. [Association of fruit and vegetable intake with cardiovascular risk factors in urban south Indians](#). *Br J Nutr*. 2008 Feb; 99 (2): 398-405. Epub 2007 Aug 3. PMID: 17678569.

## In adults, what is the relationship between the intake of vegetables and fruits, not including juice and body weight?

Bes-Rastrollo M, Martínez-González MA, Sánchez-Villegas A, de la Fuente Arrillaga C, Martínez JA. [Association of fiber intake and fruit/vegetable consumption with weight gain in a Mediterranean population](#). *Nutrition*. 2006 May; 22 (5): 504-511. Epub 2006 Feb 24. PMID: 16500082.

Buijsse B, Feskens EJ, Schulze MB, Forouhi NG, Wareham NJ, Sharp S, Palli D, Tognon G, Halkjaer J, Tjønneland A, Jakobsen MU, Overvad K, van der A DL, Du H, Sørensen TI, Boeing H. [Fruit and vegetable intakes and subsequent changes in body weight in European populations: Results from the project on Diet, Obesity and Genes \(DiOGenes\)](#). *Am J Clin Nutr*. 2009 Jul; 90 (1): 202-209. Epub 2009 May 20. PMID: 19458016.

Davis JN, Hodges VA, Gillham MB. [Normal-weight adults consume more fiber and fruit than their age- and height-matched overweight/obese counterparts](#). *J Am Diet Assoc*. 2006 Jun; 106 (6): 833-840. PMID: 16720124.

Fujioka K, Greenway F, Sheard J, Ying Y. [The effects of grapefruit on weight and insulin resistance: Relationship to the metabolic syndrome](#). *J Med Food*. 2006 Spring; 9 (1): 49-54. PMID: 16579728.

Goss J, Grubbs L. [Comparative analysis of body mass index, consumption of fruits and vegetables, smoking and physical activity among Florida residents](#). *J Community Health Nurs.* 2005 Spring; 22(1): 37-46. PMID: 15695195.

He K, Hu FB, Colditz GA, Manson JE, Willett WC, Liu S. [Changes in intake of fruits and vegetables in relation to risk of obesity and weight gain among middle-aged women](#). *Int J Obes Relat Metab Disord.* 2004 Dec; 28 (12): 1, 569-1, 574. PMID: 15467774.

Ortega RM, Rodríguez-Rodríguez E, Aparicio A, Marín-Arias LI, López-Sobaler AM. [Responses to two weight-loss programs based on approximating the diet to the ideal: Differences associated with increased cereal or vegetable consumption](#). *Int J Vitam Nutr Res.* 2006 Nov; 76 (6): 367-376. PMID: 17607956.

Radhika G, Sudha V, Mohan Sathya R, Ganesan A, Mohan V. [Association of fruit and vegetable intake with cardiovascular risk factors in urban south Indians](#). *Br J Nutr.* 2008 Feb; 99 (2): 398-405. Epub 2007 Aug 3. PMID: 17678569.

Tanumihardjo SA, Valentine AR, Zhang Z, Whigham LD, Lai HJ, Atkinson RL. [Strategies to increase vegetable or reduce energy and fat intake induce weight loss in adults](#). *Exp Biol Med (Maywood).* 2009 May; 234 (5): 542-552. Epub 2009 Feb 20. PMID: 19234056.

Vioque J, Weinbrenner T, Castelló A, Asensio L, Garcia de la Hera M. [Intake of fruits and vegetables in relation to 10-year weight gain among Spanish adults](#). *Obesity (Silver Spring).* 2008 Mar; 16 (3): 664-670. Epub 2008 Jan 17. PMID: 18239583.

Xu F, Yin XM, Tong SL. [Association between excess bodyweight and intake of red meat and vegetables among urban and rural adult Chinese in Nanjing, China](#). *Asia Pac J Public Health.* 2007;19 (3): 3-9. PMID: 18330398.

**In adults, what is the relationship between the intake of vegetables and fruits, not including juice and type 2 diabetes?**

Bazzano LA, Li TY, Joshipura KJ, Hu FB. [Intake of fruit, vegetables, and fruit juices and risk of diabetes in women](#). *Diabetes Care.* 2008 Jul; 31 (7): 1, 311-1, 317. Epub 2008 Apr 4. PMID: 18390796; PMCID: PMC2453647.

Halton TL, Willett WC, Liu S, Manson JE, Stampfer MJ, Hu FB. [Potato and french fry consumption and risk of type 2 diabetes in women](#). *Am J Clin Nutr.* 2006 Feb; 83 (2): 284-290. PMID: 16469985.

Liu S, Serdula M, Janket SJ, Cook NR, Sesso HD, Willett WC, Manson JE, Buring JE. [A prospective study of fruit and vegetable intake and the risk of type 2 diabetes in women](#). *Diabetes Care.* 2004 Dec; 27 (12): 2, 993-2, 996. PMID: 15562224.

Villegas R, Shu XO, Gao YT, Yang G, Elasy T, Li H, Zheng W. [Vegetable but not fruit consumption reduces the risk of type 2 diabetes in Chinese women](#). *J Nutr.* 2008 Mar; 138 (3): 574-580. PMID: 18287369; PMCID: PMC2615491.

Wang L, Liu S, Manson JE, Gaziano JM, Buring JE, Sesso HD. [The consumption of lycopene and tomato-based food products is not associated with the risk of type 2 diabetes in women](#). *J Nutr.* 2006 Mar; 136 (3): 620-625. PMID: 16484534.

## List of Excluded Articles with Reason

Article	Reason for Exclusion
Alonso A, de la Fuente C, Martín-Arnau AM, de Irala J, Martínez JA, Martínez-González MA. <a href="#">Fruit and vegetable consumption is inversely associated with blood pressure in a Mediterranean population with a high vegetable-fat intake: The Seguimiento Universidad de Navarra (SUN) Study.</a> <i>Br J Nutr.</i> 2004 Aug; 92 (2): 311-319. PMID: 15333163.	Results reported based on the same dataset as Nunez-Cordoba, 2009.
<a href="#">Austin GL, Adair LS, Galanko JA, Martin CF, Satia JA, Sandler RS. A diet high in fruits and low in meats reduces the risk of colorectal adenomas.</a> <i>J Nutr.</i> 2007 Apr; 137 (4): 999-1, 004. PMID: 17374667.	Cancer excluded as outcome of interest.
<a href="#">Bandera EV, Kushi LH, Moore DF, Gifkins DM, McCullough ML. Fruits and vegetables and endometrial cancer risk: A systematic literature review and meta-analysis.</a> <i>Nutr Cancer.</i> 2007; 58 (1): 6-21. Review. PMID: 17571962.	Cancer excluded as outcome of interest.
<a href="#">Barros R, Moreira A, Fonseca J, de Oliveira JF, Delgado L, Castel-Branco MG, Haahtela T, Lopes C, Moreira P. Adherence to the Mediterranean diet and fresh fruit intake are associated with improved asthma control.</a> <i>Allergy.</i> 2008 Jul; 63 (7): 917-923. PMID: 18588559.	Participants were diagnosed with asthma.
<a href="#">Benetou V, Orfanos P, Lagiou P, Trichopoulos D, Boffetta P, Trichopoulou A. Vegetables and fruits in relation to cancer risk: evidence from the Greek EPIC cohort study.</a> <i>Cancer Epidemiol Biomarkers Prev.</i> 2008 Feb; 17 (2): 387-392. PMID: 18268122.	Cancer excluded as outcome of interest.
<a href="#">Boeing H, Dietrich T, Hoffmann K, Pischedl T, Ferrari P, Lahmann PH, Boutron-Ruault MC, Clavel-Chapelon F, Allen N, Key T, Skeie G, Lund E, Olsen A, Tjønneland A, Overvad K, Jensen MK, Rohrmann S, Linseisen J, Trichopoulou A, Bamia C, Psaltopoulou T, Weinshall L, Johansson I, Sánchez MJ, Jakobsen P, Ardanaz E, Amiano P, Chirlaque MD, Quirós JR, Wirfält E, Berglund G, Peeters PH, van Gils CH, Bueno-de-Mesquita HB, Büchner FL, Berrino F, Palli D, Sacerdote C, Tumino R, Panico S, Bingham S, Khaw KT, Slimani N, Norat T, Jenab M, Riboli E. Intake of fruits and vegetables and risk of cancer of the upper aero-digestive tract: The prospective EPIC-study.</a> <i>Cancer Causes Control.</i> 2006 Sep; 17 (7): 957-969. PMID: 16841263.	Cancer excluded as outcome of interest.
<a href="#">Chan JM, Wang F, Holly EA. Vegetable and fruit intake and pancreatic cancer in a population-based case-control study in the San Francisco bay area.</a> <i>Cancer Epidemiol Biomarkers Prev.</i> 2005 Sep; 14 (9): 2, 093-2, 097. PMID: 16172215.	Cancer excluded as outcome of interest.
<a href="#">Chen G, Heilbrun LK, Venkatramamoorthy R, Maranci V, Redd JN, Klurfeld DM, Djuric Z. Effects of low-fat and/or high-fruit-and-vegetable diets on plasma levels of 8-isoprostan-F2alpha in the Nutrition and Breast Health study.</a> <i>Nutr Cancer.</i> 2004; 50 (2): 155-160. PMID: 15623461.	Does not include breast cancer incidence in analyses: Measured intermediate outcome (8-isoprostan-F2alpha).
<a href="#">Crujeiras AB, Parra MD, Rodríguez MC, Martínez de Morentin BE, Martínez JA. A role for fruit content in energy-restricted diets in improving antioxidant status in obese women during weight loss.</a> <i>Nutrition.</i> 2006 Jun; 22 (6): 593-599. PMID: 16704952.	Sample size less than inclusion criteria.
<a href="#">Darmon N, Darmon M, Maillot M, Drewnowski A. A nutrient density standard for vegetables and fruits: Nutrients per calorie and nutrients per unit cost.</a> <i>J Am Diet Assoc.</i> 2005 Dec; 105 (12): 1, 881-1, 887. PMID: 16321593.	Does not answer question: Does not examine the relationship between vegetables and fruits and health outcomes.

<p>Dauchet L, Ferrières J, Arveiler D, Yarnell JW, Gey F, Ducimetière P, Ruidavets JB, Haas B, Evans A, Bingham A, Amouyel P, Dallongeville J. <a href="#">Frequency of fruit and vegetable consumption and coronary heart disease in France and Northern Ireland: The PRIME study</a>. <i>Br J Nutr.</i> 2004 Dec; 92 (6): 963-972. PMID: 15613259.</p>	<p>Included in He, 2006.</p>
<p>de Oliveira MC, Sichieri R, Venturini Mozzer R. <a href="#">A low-energy-dense diet adding fruit reduces weight and energy intake in women</a>. <i>Appetite.</i> 2008 Sep; 51 (2): 291-295. Epub 2008 Mar 7. PMID: 18439712.</p>	<p>Dropout rate higher than inclusion criteria.</p>
<p>De Stefani E, Boffetta P, Deneo-Pellegrini H, Ronco AL, Correa P, Mendilaharsu M. <a href="#">The role of vegetable and fruit consumption in the aetiology of squamous cell carcinoma of the oesophagus: A case-control study in Uruguay</a>. <i>Int J Cancer.</i> 2005 Aug 10; 116 (1): 130-135. PMID: 15756680.</p>	<p>Cancer excluded as outcome of interest.</p>
<p>Do MH, Lee SS, Kim JY, Jung PJ, Lee MH. <a href="#">Fruits, vegetables, soy foods and breast cancer in pre- and postmenopausal Korean women: A case-control study</a>. <i>Int J Vitam Nutr Res.</i> 2007 Mar; 77 (2): 130-141. PMID: 17896586.</p>	<p>Cancer excluded as outcome of interest.</p>
<p>Dosil-Díaz O, Ruano-Ravina A, Gestal-Otero JJ, Barros-Dios JM. <a href="#">Consumption of fruit and vegetables and risk of lung cancer: A case-control study in Galicia, Spain</a>. <i>Nutrition.</i> 2008 May; 24 (5): 407-413. Epub 2008 Mar 7. PMID: 18314310.</p>	<p>Cancer excluded as outcome of interest.</p>
<p>Dove ER, Hodgson JM, Puddey IB, Beilin LJ, Lee YP, Mori TA. <a href="#">Skim milk compared with a fruit drink acutely reduces appetite and energy intake in overweight men and women</a>. <i>Am J Clin Nutr.</i> 2009 Jul; 90 (1): 70-75. Epub 2009 May 27. PMID: 19474132.</p>	<p>Does not include body weight in analyses.</p>
<p>Dubowitz T, Heron M, Bird CE, Lurie N, Finch BK, Basurto-Dávila R, Hale L, Escarce JJ. <a href="#">Neighborhood socioeconomic status and fruit and vegetable intake among whites, blacks and Mexican Americans in the United States</a>. <i>Am J Clin Nutr.</i> 2008 Jun; 87 (6): 1, 883-1, 891. PMID: 18541581.</p>	<p>Does not answer question: Does not examine the relationship between vegetables and fruits and health outcomes.</p>
<p>Ellinger S, Ellinger J, Stehle P. <a href="#">Tomatoes, tomato products and lycopene in the prevention and treatment of prostate cancer: Do we have the evidence from intervention studies?</a> <i>Curr Opin Clin Nutr Metab Care.</i> 2006 Nov; 9 (6): 722-727. Review. PMID: 17053426.</p>	<p>Study design is narrative review.</p>
<p>Ellingsen I, Hjerkinn EM, Seljeflot I, Arnesen H, Tonstad S. <a href="#">Consumption of fruit and berries is inversely associated with carotid atherosclerosis in elderly men</a>. <i>Br J Nutr.</i> 2008 Mar; 99 (3): 674-681. Epub 2007 Sep 26. Erratum in: <i>Br J Nutr.</i> 2008 Mar; 99 (3): 697. PMID: 17894919.</p>	<p>Does not answer question: Does not include selected health outcome of interest.</p>
<p>Etminan M, Takkouche B, Caamaño-Isorna F. <a href="#">The role of tomato products and lycopene in the prevention of prostate cancer: A meta-analysis of observational studies</a>. <i>Cancer Epidemiol Biomarkers Prev.</i> 2004 Mar; 13 (3): 340-345. PMID: 15006906.</p>	<p>Cancer excluded as outcome of interest.</p>
<p>Freedman ND, Park Y, Subar AF, Hollenbeck AR, Leitzmann MF, Schatzkin A, Abnet CC. <a href="#">Fruit and vegetable intake and esophageal cancer in a large prospective cohort study</a>. <i>Int J Cancer.</i> 2007 Dec 15; 121 (12): 2, 753-2, 760. PMID: 17691111.</p>	<p>Cancer excluded as outcome of interest.</p>
<p>Freedman ND, Park Y, Subar AF, Hollenbeck AR, Leitzmann MF, Schatzkin A, Abnet CC. <a href="#">Fruit and vegetable intake and head and neck cancer risk in a large United States prospective cohort study</a>. <i>Int J Cancer.</i> 2008 May 15; 122 (10): 2, 330-2, 336. PMID: 18092323.</p>	<p>Cancer excluded as outcome of interest.</p>

<p>Freedman ND, Subar AF, Hollenbeck AR, Leitzmann MF, Schatzkin A, Abnet CC. <a href="#">Fruit and vegetable intake and gastric cancer risk in a large United States prospective cohort study</a>. <i>Cancer Causes Control</i>. 2008 Jun; 19 (5): 459-467. Epub 2008 Jan 1. PMID: 18166992.</p>	<p>Cancer excluded as outcome of interest.</p>
<p>Galeone C, Negri E, Pelucchi C, La Vecchia C, Bosetti C, Hu J. <a href="#">Dietary intake of fruit and vegetable and lung cancer risk: A case-control study in Harbin, northeast China</a>. <i>Ann Oncol</i>. 2007 Feb; 18 (2): 388-392. Epub 2006 Oct 23. PMID: 17060488.</p>	<p>Cancer excluded as outcome of interest.</p>
<p>Gallicchio L, Matanoski G, Tao XG, Chen L, Lam TK, Boyd K, Robinson KA, Balick L, Mickelson S, Caulfield LE, Herman JG, Guallar E, Alberg AJ. <a href="#">Adulthood consumption of preserved and non-preserved vegetables and the risk of nasopharyngeal carcinoma: A systematic review</a>. <i>Int J Cancer</i>. 2006 Sep 1;119 (5): 1, 125-1, 135. Review. PubMed PMID: 16570274.</p>	<p>Cancer excluded as outcome of interest.</p>
<p>George SM, Park Y, Leitzmann MF, Freedman ND, Dowling EC, Reedy J, Schatzkin A, Hollenbeck A, Subar AF. <a href="#">Fruit and vegetable intake and risk of cancer: a prospective cohort study</a>. <i>Am J Clin Nutr</i>. 2009 Jan; 89 (1): 347-353. Epub 2008 Dec 3. PMID: 19056579; Central PMCID: PMC2647712.</p>	<p>Cancer excluded as outcome of interest.</p>
<p>Giammarioli S, Filesi C, Vitale B, Cantagallo A, Dragoni F, Sanzini E. <a href="#">Effect of high intakes of fruit and vegetables on redox status in type 2 onset diabetes: A pilot study</a>. <i>Int J Vitam Nutr Res</i>. 2004 Sep; 74 (5): 313-320. PMID: 15628668.</p>	<p>Participants diagnosed with type 2 diabetes.</p>
<p>González CA, Pera G, Agudo A, Bueno-de-Mesquita HB, Ceroti M, Boeing H, Schulz M, Del Giudice G, Plebani M, Carneiro F, Berrino F, Sacerdote C, Tumino R, Panico S, Berglund G, Simán H, Hallmans G, Stenling R, Martínez C, Dorronsoro M, Barricarte A, Navarro C, Quiros JR, Allen N, Key TJ, Bingham S, Day NE, Linseisen J, Nagel G, Overvad K, Jensen MK, Olsen A, Tjønneland A, Büchner FL, Peeters PH, Numans ME, Clavel-Chapelon F, Boutron-Ruault MC, Roukos D, Trichopoulou A, Psaltopoulou T, Lund E, Casagrande C, Slimani N, Jenab M, Riboli E. <a href="#">Fruit and vegetable intake and the risk of stomach and oesophagus adenocarcinoma in the European Prospective Investigation into Cancer and Nutrition (EPIC-EURGAST)</a>. <i>Int J Cancer</i>. 2006 May 15; 118 (10): 2, 559-2, 566. PMID: 16380980.</p>	<p>Cancer excluded as outcome of interest.</p>
<p>Gorinstein S, Caspi A, Libman I, Lerner HT, Huang D, Leontowicz H, Leontowicz M, Tashma Z, Katrich E, Feng S, Trakhtenberg S. <a href="#">Red grapefruit positively influences serum triglyceride level in patients suffering from coronary atherosclerosis: Studies in vitro and in humans</a>. <i>J Agric Food Chem</i>. 2006 Mar 8; 54 (5): 1, 887-1, 892. PubMed PMID: 16506849.</p>	<p>Participants diagnosed with hyperlipidemia and had received coronary bypass surgery.</p>
<p>Holick CN, De Vivo I, Feskanich D, Giovannucci E, Stampfer M, Michaud DS. <a href="#">Intake of fruits and vegetables, carotenoids, folate and vitamins A, C, E and risk of bladder cancer among women (United States)</a>. <i>Cancer Causes Control</i>. 2005 Dec; 16 (10): 1, 135-1, 145. PMID: 16215863.</p>	<p>Cancer excluded as outcome of interest.</p>
<p>Holick CN, Giovannucci EL, Rosner B, Stampfer MJ, Michaud DS. <a href="#">Prospective study of intake of fruit, vegetables and carotenoids and the risk of adult glioma</a>. <i>Am J Clin Nutr</i>. 2007 Mar; 85 (3): 877-886. PMID: 17344512.</p>	<p>Cancer excluded as outcome of interest.</p>
<p>Jansen MC, Bueno-de-Mesquita HB, Feskens EJ, Streppel MT, Kok FJ, Kromhout D. <a href="#">Quantity and variety of fruit and vegetable consumption and cancer risk</a>. <i>Nutr Cancer</i>. 2004; 48 (2): 142-148. PMID: 15231448.</p>	<p>Cancer excluded as outcome of interest.</p>

Johnsen SP. <a href="#">Intake of fruit and vegetables and risk of stroke: An overview.</a> <i>Curr Opin Clin Nutr Metab Care</i> . 2004 Nov; 7 (6): 665-670. Review. PMID: 15534435.	Study design is narrative review.
Kavanaugh CJ, Trumbo PR, Ellwood KC. <a href="#">The U.S. Food and Drug Administration's evidence-based review for qualified health claims: Tomatoes, lycopene and cancer.</a> <i>J Natl Cancer Inst</i> . 2007 Jul 18; 99 (14): 1, 074-1, 085. Epub 2007 Jul 10. Review. PMID: 17623802.	Cancer excluded as outcome of interest.
Kellen E, Zeegers M, Paulussen A, Van Dongen M, Buntinx F. <a href="#">Fruit consumption reduces the effect of smoking on bladder cancer risk. The Belgian case control study on bladder cancer.</a> <i>Int J Cancer</i> . 2006 May 15; 118 (10): 2, 572-2, 578. PMID: 16380991.	Cancer excluded as outcome of interest.
Kim SY, Yoon S, Kwon SM, Park KS, Lee-Kim YC. <a href="#">Kale juice improves coronary artery disease risk factors in hypercholesterolemic men.</a> <i>Biomed Environ Sci</i> . 2008 Apr; 21 (2): 91-97. PMID: 18548846.	Participants diagnosed with hypercholesterolemia.

Article	Reason for Exclusion
Kirsh VA, Mayne ST, Peters U, Chatterjee N, Leitzmann MF, Dixon LB, Urban DA, Crawford ED, Hayes RB. <a href="#">A prospective study of lycopene and tomato product intake and risk of prostate cancer.</a> <i>Cancer Epidemiol Biomarkers Prev</i> . 2006 Jan; 15 (1): 92-98. PMID: 16434593.	Cancer excluded as outcome of interest.
Kirsh VA, Peters U, Mayne ST, Subar AF, Chatterjee N, Johnson CC, Hayes RB; <a href="#">Prospective study of fruit and vegetable intake and risk of prostate cancer.</a> Prospective study of fruit and vegetable intake and risk of prostate cancer. <i>J Natl Cancer Inst</i> . 2007 Aug 1; 99 (15): 1, 200-1, 209. Epub 2007 Jul 24. PMID: 17652276.	Cancer excluded as outcome of interest.
Klassen AC, Garrett-Mayer E, Houts PS, Shankar S, Torio CM. <a href="#">The relationship of body size to participation and success in a fruits and vegetables intervention among low-income women.</a> <i>J Community Health</i> . 2008 Apr; 33 (2): 78-89. PMID: 18074208.	Does not answer question: Does not examine the relationship between vegetables and fruits and health outcomes.
Koushik A, Hunter DJ, Spiegelman D, Anderson KE, Arslan AA, Beeson WL, van den Brandt PA, Buring JE, Cerhan JR, Colditz GA, Fraser GE, Freudenheim JL, Genkinger JM, Goldbohm RA, Hankinson SE, Koenig KL, Larsson SC, Leitzmann M, McCullough ML, Miller AB, Patel A, Rohan TE, Schatzkin A, Smit E, Willett WC, Wolk A, Zhang SM, Smith-Warner SA. <a href="#">Fruits and vegetables and ovarian cancer risk in a pooled analysis of 12 cohort studies.</a> <i>Cancer Epidemiol Biomarkers Prev</i> . 2005 Sep; 14 (9): 2, 160-2, 167. PMID: 16172226.	Cancer excluded as outcome of interest.
Koushik A, Hunter DJ, Spiegelman D, Beeson WL, van den Brandt PA, Buring JE, Calle EE, Cho E, Fraser GE, Freudenheim JL, Fuchs CS, Giovannucci EL, Goldbohm RA, Harnack L, Jacobs DR Jr, Kato I, Krogh V, Larsson SC, Leitzmann MF, Marshall JR, McCullough ML, Miller AB, Pietinen P, Rohan TE, Schatzkin A, Sieri S, Virtanen MJ, Wolk A, Zeleniuch-Jacquotte A, Zhang SM, Smith-Warner SA. <a href="#">Fruits, vegetables, and colon cancer risk in a pooled analysis of 14 cohort studies.</a> <i>J Natl Cancer Inst</i> . 2007 Oct 3; 99 (19): 1, 471-1, 483. Epub 2007 Sep 25. PMID: 17895473.	Cancer excluded as outcome of interest.

Kurahashi N, Inoue M, Iwasaki M, Tanaka Y, Mizokami M, Tsugane S; JPHC Study Group. <a href="#">Vegetable, fruit and antioxidant nutrient consumption and subsequent risk of hepatocellular carcinoma: A prospective cohort study in Japan</a> . <i>Br J Cancer</i> . 2009 Jan 13; 100 (1): 181-184. PMID: 19127270.	Cancer excluded as outcome of interest.
Lam TK, Gallicchio L, Lindsley K, Shiels M, Hammond E, Tao XG, Chen L, Robinson KA, Caulfield LE, Herman JG, Guallar E, Alberg AJ. <a href="#">Cruciferous vegetable consumption and lung cancer risk: a systematic review</a> . <i>Cancer Epidemiol Biomarkers Prev</i> . 2009 Jan; 18 (1): 184-195. Review. PMID: 19124497.	Cancer excluded as outcome of interest.
Larsson SC, Andersson SO, Johansson JE, Wolk A. <a href="#">Fruit and vegetable consumption and risk of bladder cancer: A prospective cohort study</a> . <i>Cancer Epidemiol Biomarkers Prev</i> . 2008 Sep; 17 (9): 2, 519-2, 522. PMID: 18768526.	Cancer excluded as outcome of interest.
Larsson SC, Bergkvist L, Wolk A. <a href="#">Fruit and vegetable consumption and incidence of gastric cancer: a prospective study</a> . <i>Cancer Epidemiol Biomarkers Prev</i> . 2006 Oct; 15 (10): 1, 998-2, 001. PMID: 17035412.	Cancer excluded as outcome of interest.
Larsson SC, Häkansson N, Näslund I, Bergkvist L, Wolk A. <a href="#">Fruit and vegetable consumption in relation to pancreatic cancer risk: A prospective study</a> . <i>Cancer Epidemiol Biomarkers Prev</i> . 2006 Feb; 15 (2): 301-305. PMID: 16492919.	Cancer excluded as outcome of interest.
Larsson SC, Holmberg L, Wolk A. <a href="#">Fruit and vegetable consumption in relation to ovarian cancer incidence: The Swedish Mammography Cohort</a> . <i>Br J Cancer</i> . 2004 Jun 1; 90 (11): 2, 167-2, 170. PMID: 15150575.	Cancer excluded as outcome of interest.
Lee JE, Giovannucci E, Smith-Warner SA, Spiegelman D, Willett WC, Curhan GC. <a href="#">Intakes of fruits, vegetables, vitamins A, C, and E and carotenoids and risk of renal cell cancer</a> . <i>Cancer Epidemiol Biomarkers Prev</i> . 2006 Dec; 15 (12): 2, 445-2, 452. PMID: 17164369.	Cancer excluded as outcome of interest.
Lin J, Zhang SM, Cook NR, Rexrode KM, Liu S, Manson JE, Lee IM, Buring JE. <a href="#">Dietary intakes of fruit, vegetables, and fiber and risk of colorectal cancer in a prospective cohort of women (United States)</a> . <i>Cancer Causes Control</i> . 2005 Apr; 16 (3): 225-233. PMID: 15947874.	Cancer excluded as outcome of interest.
Liu Y, Sobue T, Otani T, Tsugane S. <a href="#">Vegetables, fruit consumption and risk of lung cancer among middle-aged Japanese men and women: JPHC study</a> . <i>Cancer Causes Control</i> . 2004 May; 15 (4): 349-357. PMID: 15141136.	Cancer excluded as outcome of interest.
Longo-Mbenza B, Tshimanga KB, Buassa-bu-Tsumbu B, Kabangu MJ. <a href="#">Diets rich in vegetables and physical activity are associated with a decreased risk of pregnancy induced hypertension among rural women from Kimpese, DR Congo</a> . <i>Niger J Med</i> . 2008 Jul-Aug; 17 (3): 265-269. PMID: 18788250.	Study population not from a developed country as defined by the Human Development Index.
Lunet N, Lacerda-Vieira A, Barros H. <a href="#">Fruit and vegetables consumption and gastric cancer: a systematic review and meta-analysis of cohort studies</a> . <i>Nutr Cancer</i> . 2005; 53 (1): 1-10. Review. PMID: 16351501.	Cancer excluded as outcome of interest.
Lunet N, Valbuena C, Vieira AL, Lopes C, Lopes C, David L, Carneiro F, Barros H. <a href="#">Fruit and vegetable consumption and gastric cancer by location and histological type: Case-control and meta-analysis</a> . <i>Eur J Cancer Prev</i> . 2007 Aug; 16 (4): 312-327. PMID: 17554204.	Cancer excluded as outcome of interest.
Masala G, Ceroti M, Pala V, Krogh V, Vineis P, Sacerdote C, Saieva C, Salvini S, Sieri S, Berrino F, Panico S, Mattiello A, Tumino R, Giordanella MC, Bamia C, Trichopoulou A, Riboli E, Palli D. <a href="#">A dietary pattern rich in olive oil and raw vegetables is associated with lower mortality in Italian elderly subjects</a> . <i>Br J Nutr</i> . 2007 Aug; 98 (2): 406-415. Epub 2007 Apr 3. PMID: 17403268.	Does not answer question: Discusses vegetables and fruits as part of dietary pattern.

Maserejian NN, Giovannucci E, Rosner B, Zavras A, Joshipura K. <a href="#">Prospective study of fruits and vegetables and risk of oral premalignant lesions in men</a> . Am J Epidemiol. 2006 Sep 15; 164 (6): 556-566. Epub 2006 Jul 17. PMID: 16847039.	Cancer excluded as outcome of interest.
McCall DO, McGartland CP, McKinley MC, Patterson CC, Sharpe P, McCance DR, Young IS, Woodside JV. <a href="#">Dietary intake of fruits and vegetables improves microvascular function in hypertensive subjects in a dose-dependent manner</a> . Circulation. 2009 Apr 28; 119 (16): 2, 153-2, 160. Epub 2009 Apr 13. PMID: 19364976.	Participants diagnosed with hypertension, and study did not measure identified outcome of interest.
McCullough ML, Bandera EV, Patel R, Patel AV, Gansler T, Kushi LH, Thun MJ, Calle EE. <a href="#">A prospective study of fruits, vegetables and risk of endometrial cancer</a> . Am J Epidemiol. 2007 Oct 15; 166 (8): 902-911. Epub 2007 Aug 9. PMID: 17690222.	Cancer excluded as outcome of interest.
Michels KB, Giovannucci E, Chan AT, Singhania R, Fuchs CS, Willett WC. <a href="#">Fruit and vegetable consumption and colorectal adenomas in the Nurses' Health Study</a> . Cancer Res. 2006 Apr 1; 66 (7): 3, 942-3, 953. PMID: 16585224.	Cancer excluded as outcome of interest.
Mikkelsen TB, Osler M, Orozova-Bekkevold I, Knudsen VK, Olsen SF. <a href="#">Association between fruit and vegetable consumption and birth weight: A prospective study among 43, 585 Danish women</a> . Scand J Public Health. 2006; 34 (6): 616-622. PMID: 17132595.	Does not answer question: addresses vegetable and fruit intake during pregnancy and birth weight.
Millen AE, Subar AF, Graubard BI, Peters U, Hayes RB, Weissfeld JL, Yokochi LA, Ziegler RG; PLCO Cancer Screening Trial Project Team. <a href="#">Fruit and vegetable intake and prevalence of colorectal adenoma in a cancer screening trial</a> . Am J Clin Nutr. 2007 Dec; 86 (6): 1, 754-1, 764. PMID: 18065596.	Cancer excluded as outcome of interest.
Mommers M, Schouten LJ, Goldbohm RA, van den Brandt PA. <a href="#">Consumption of vegetables and fruits and risk of ovarian carcinoma</a> . Cancer. 2005 Oct 1; 104 (7): 1, 512-1, 519. PMID: 16104037.	Cancer excluded as outcome of interest.
Nomura AM, Wilkens LR, Murphy SP, Hankin JH, Henderson BE, Pike MC, Kolonel LN. <a href="#">Association of vegetable, fruit, and grain intakes with colorectal cancer: The Multiethnic Cohort Study</a> . Am J Clin Nutr. 2008 Sep; 88 (3): 730-737. PMID: 18779290.	Cancer excluded as outcome of interest.
Nöthlings U, Schulze MB, Weikert C, Boeing H, van der Schouw YT, Bamia C, Benetou V, Lagiou P, Krogh V, Beulens JW, Peeters PH, Halkjaer J, Tjønneland A, Tumino R, Panico S, Masala G, Clavel-Chapelon F, de Lauzon B, Boutron-Ruault MC, Vercambre MN, Kaaks R, Linseisen J, Overvad K, Arriola L, Ardanaz E, Gonzalez CA, Tormo MJ, Bingham S, Khaw KT, Key TJ, Vineis P, Riboli E, Ferrari P, Boffetta P, Bueno-de-Mesquita HB, van der A DL, Berglund G, Wärffelt E, Hallmans G, Johansson I, Lund E, Trichopoulou A. <a href="#">Intake of vegetables, legumes, and fruit, and risk for all-cause, cardiovascular and cancer mortality in a European diabetic population</a> . J Nutr. 2008 Apr; 138 (4): 775-781. PMID: 18356334.	Participants were diagnosed with diabetes.
Nöthlings U, Wilkens LR, Murphy SP, Hankin JH, Henderson BE, Kolonel LN. <a href="#">Vegetable intake and pancreatic cancer risk: The multiethnic cohort study</a> . Am J Epidemiol. 2007 Jan 15; 165 (2): 138-147. Epub 2006 Oct 26. PMID: 17068094.	Cancer excluded as outcome of interest.
Nouraei M, Pietinen P, Kamangar F, Dawsey SM, Abnet CC, Albanes D, Virtamo J, Taylor PR. <a href="#">Fruits, vegetables, and antioxidants and risk of gastric cancer among male smokers</a> . Cancer Epidemiol Biomarkers Prev. 2005 Sep; 14 (9): 2, 087-2, 092. PMID: 16172214.	Cancer excluded as outcome of interest.

Orjuela MA, Titievsky L, Liu X, Ramirez-Ortiz M, Ponce-Castaneda V, Lecona E, Molina E, Beaverson K, Abramson DH, Mueller NE. <a href="#">Fruit and vegetable intake during pregnancy and risk for development of sporadic retinoblastoma</a> . <i>Cancer Epidemiol Biomarkers Prev.</i> 2005 Jun; 14 (6): 1, 433-1, 440. PMID: 15941952.	Does not answer question: does not address outcomes of interest (examines retinoblastoma).
Papanikolaou Y, Fulgoni VL 3rd. <a href="#">Bean consumption is associated with greater nutrient intake, reduced systolic blood pressure, lower body weight and a smaller waist circumference in adults: Results from the National Health and Nutrition Examination Survey 1999-2002</a> . <i>J Am Coll Nutr.</i> 2008 Oct; 27 (5): 569-576. PMID: 18845707.	Beans considered in separate question on cooked dry beans and peas and selected health outcomes.
Pavia M, Pileggi C, Nobile CG, Angelillo IF. <a href="#">Association between fruit and vegetable consumption and oral cancer: A meta-analysis of observational studies</a> . <i>Am J Clin Nutr.</i> 2006 May; 83 (5): 1, 126-1, 134. PMID: 16685056.	Cancer excluded as outcome of interest.
Pham TM, Fujino Y, Ide R, Kubo T, Shirane K, Tokui N, Mizoue T, Ogimoto I, Matsuda S, Yoshimura T. <a href="#">Prospective study of vegetable consumption and liver cancer in Japan</a> . <i>Int J Cancer.</i> 2006 Nov 15; 119 (10): 2, 408-2, 411. PMID: 16894561.	Cancer excluded as outcome of interest.
Pomerleau J, Lock K, Knai C, McKee M. <a href="#">Interventions designed to increase adult fruit and vegetable intake can be effective: A systematic review of the literature</a> . <i>J Nutr.</i> 2005 Oct; 135 (10): 2, 486-2, 495. Review. PMID: 16177217.	Does not answer question: Evaluates interventions to increase fruit and vegetable intake.
Prynne CJ, Mishra GD, O'Connell MA, Muniz G, Laskey MA, Yan L, Prentice A, Ginty F. <a href="#">Fruit and vegetable intakes and bone mineral status: A cross sectional study in five age and sex cohorts</a> . <i>Am J Clin Nutr.</i> 2006 Jun; 83 (6): 1, 420-1, 428. PMID: 16789345.	Does not answer question: Does not address outcomes of interest.
Rai A, Mohapatra SC, Shukla HS. <a href="#">Correlates between vegetable consumption and gallbladder cancer</a> . <i>Eur J Cancer Prev.</i> 2006 Apr; 15 (2): 134-137. PMID: 16523010.	Participants diagnosed with gallbladder cancer or gallstone disease.

Article	Reason for Exclusion
Ramón R, Ballester F, Iñiguez C, Rebagliato M, Murcia M, Esplugues A, Marco A, García de la Hera M, Vioque J. <a href="#">Vegetable but not fruit intake during pregnancy is associated with newborn anthropometric measures</a> . <i>J Nutr.</i> 2009 Mar; 139 (3): 561-567. Epub 2009 Jan 21. PMID: 19158218.	Does not answer question: Addresses fruit and vegetable intake during pregnancy and birth outcomes.
Rashidkhani B, Lindblad P, Wolk A. <a href="#">Fruits, vegetables and risk of renal cell carcinoma: a prospective study of Swedish women</a> . <i>Int J Cancer.</i> 2005 Jan 20; 113 (3): 451-455. PMID: 15455348.	Cancer excluded as outcome of interest.
Rodríguez MC, Parra MD, Marques-Lopes I, De Morentin BE, González A, Martínez JA. <a href="#">Effects of two energy-restricted diets containing different fruit amounts on body weight loss and macronutrient oxidation</a> . <i>Plant Foods Hum Nutr.</i> 2005 Dec; 60 (4): 219-224. PMID: 16395633.	Does not meet inclusion criteria for sample size.
Romieu I, Varraso R, Avenel V, Leynaert B, Kauffmann F, Clavel-Chapelon F. <a href="#">Fruit and vegetable intakes and asthma in the E3N study</a> . <i>Thorax.</i> 2006 Mar; 61 (3): 209-215. Epub 2006 Jan 5. PMID: 16396945; PMCID: PMC1974844.	Does not answer question: Does not measure an identified outcome of interest.

<p>Sandoval M, Font R, Mañós M, Dicenta M, Quintana MJ, Bosch FX, Castellsagué X. <a href="#">The role of vegetable and fruit consumption and other habits on survival following the diagnosis of oral cancer: A prospective study in Spain</a>. <i>Int J Oral Maxillofac Surg</i>. 2009 Jan; 38 (1): 31-39. Epub 2008 Oct 31. PubMed PMID: 18951763.</p>	<p>Participants diagnosed with oral cancer.</p>
<p>Sartorelli DS, Franco LJ, Cardoso MA. <a href="#">High intake of fruits and vegetables predicts weight loss in Brazilian overweight adults</a>. <i>Nutr Res</i>. 2008 Apr; 28 (4): 233-238. PMID: 19083413.</p>	<p>Dropout rate higher than inclusion criteria.</p>
<p>Sato K, Kawakami N, Ohtsu T, Tsutsumi A, Miyazaki S, Masumoto T, Horie S, Haratani T, Kobayashi F, Araki S. <a href="#">Broccoli consumption and chronic atrophic gastritis among Japanese males: An epidemiological investigation</a>. <i>Acta Med Okayama</i>. 2004 Jun; 58 (3): 127-133. PMID: 15471434.</p>	<p>Does not answer question: Does not include outcome of interest (measured chronic atrophic gastritis).</p>
<p>Sato Y, Tsubono Y, Nakaya N, Ogawa K, Kurashima K, Kuriyama S, Hozawa A, Nishino Y, Shibuya D, Tsuji I. <a href="#">Fruit and vegetable consumption and risk of colorectal cancer in Japan: The Miyagi Cohort Study</a>. <i>Public Health Nutr</i>. 2005 May; 8 (3): 309-314. PMID: 15918928.</p>	<p>Cancer excluded as outcome of interest.</p>
<p>Schnäbele K, Briviba K, Bub A, Roser S, Pool-Zobel BL, Rechkemmer G. <a href="#">Effects of carrot and tomato juice consumption on faecal markers relevant to colon carcinogenesis in humans</a>. <i>Br J Nutr</i>. 2008 Mar; 99 (3): 606-613. PMID: 18254985.</p>	<p>Does not answer question: Does not include outcome of interest.</p>
<p>Schulz M, Lahmann PH, Boeing H, Hoffmann K, Allen N, Key TJ, Bingham S, Wirfält E, Berglund G, Lundin E, Hallmans G, Lukanova A, Martínez García C, González CA, Tormo MJ, Quirós JR, Ardanaz E, Larrañaga N, Lund E, Gram IT, Skeie G, Peeters PH, van Gils CH, Bueno-de-Mesquita HB, Büchner FL, Pasanisi P, Galasso R, Palli D, Tumino R, Vineis P, Trichopoulou A, Kalapothaki V, Trichopoulos D, Chang-Claude J, Linseisen J, Boutron-Ruault MC, Touillaud M, Clavel-Chapelon F, Olsen A, Tjønneland A, Overvad K, Tetsche M, Jenab M, Norat T, Kaaks R, Riboli E. <a href="#">Fruit and vegetable consumption and risk of epithelial ovarian cancer: The European Prospective Investigation into Cancer and Nutrition</a>. <i>Cancer Epidemiol Biomarkers Prev</i>. 2005 Nov; 14 (11 Pt 1): 2, 531-2, 535. PMID: 16284374.</p>	<p>Cancer excluded as outcome of interest.</p>
<p>Setiawan VW, Yu GP, Lu QY, Lu ML, Yu SZ, Mu L, Zhang JG, Kurtz RC, Cai L, Hsieh CC, Zhang ZF. <a href="#">Allium vegetables and stomach cancer risk in China</a>. <i>Asian Pac J Cancer Prev</i>. 2005 Jul-Sep; 6 (3): 387-395. PMID: 16236005.</p>	<p>Cancer excluded as outcome of interest.</p>
<p>Shi Z, Hu X, Yuan B, Hu G, Pan X, Dai Y, Byles JE, Holmboe-Ottesen G. <a href="#">Vegetable-rich food pattern is related to obesity in China</a>. <i>Int J Obes (Lond)</i>. 2008 Jun; 32 (6): 975-984. Epub 2008 Mar 4. PMID: 18317472.</p>	<p>Includes fruits, vegetables, and whole grains as part of vegetable-rich food pattern. Does not evaluate vegetable and fruit and health outcomes specifically.</p>
<p>Skuladottir H, Tjønneland A, Overvad K, Stripp C, Olsen JH. <a href="#">Does high intake of fruit and vegetables improve lung cancer survival?</a> <i>Lung Cancer</i>. 2006 Mar; 51 (3): 267-273. Epub 2006 Feb 15. PMID: 16469411.</p>	<p>Participants diagnosed with lung cancer.</p>
<p>Stoner GD, Wang LS, Casto BC. <a href="#">Laboratory and clinical studies of cancer chemoprevention by antioxidants in berries</a>. <i>Carcinogenesis</i>. 2008 Sep; 29 (9): 1, 665-1, 674. Epub 2008 Jun 9. Review. PMID: 18544560.</p>	<p>Study design is narrative review.</p>
<p>Sunny L. <a href="#">A low fat diet rich in fruits and vegetables may reduce the risk of developing prostate cancer</a>. <i>Asian Pac J Cancer Prev</i>. 2005 Oct-Dec; 6 (4): 490-496. PMID: 16435998.</p>	<p>Cancer excluded as outcome of interest.</p>

Tang L, Zirpoli GR, Guru K, Moysich KB, Zhang Y, Ambrosone CB, McCann SE. <a href="#">Consumption of raw cruciferous vegetables is inversely associated with bladder cancer risk</a> . <i>Cancer Epidemiol Biomarkers Prev.</i> 2008 Apr; 17 (4): 938-944. PMID: 18398034.	Cancer excluded as outcome of interest.
Tao MH, Xu WH, Zheng W, Gao YT, Ruan ZX, Cheng JR, Xiang YB, Shu XO. <a href="#">A case-control study in Shanghai of fruit and vegetable intake and endometrial cancer</a> . <i>Br J Cancer.</i> 2005 Jun 6; 92 (11): 2, 059-2, 064. PMID: 15886701.	Cancer excluded as outcome of interest.
te Velde SJ, Twisk JW, Brug J. <a href="#">Tracking of fruit and vegetable consumption from adolescence into adulthood and its longitudinal association with overweight</a> . <i>Br J Nutr.</i> 2007 Aug; 98 (2): 431-438. Epub 2007 Apr 16. Erratum in: <i>Br J Nutr.</i> 2007 Oct; 98 (4): 871. PMID: 17433126.	Adolescents considered in the Energy Balance section.
Thomson CA, Rock CL, Giuliano AR, Newton TR, Cui H, Reid PM, Green TL, Alberts DS; Women's Healthy Eating & Living Study Group. <a href="#">Longitudinal changes in body weight and body composition among women previously treated for breast cancer consuming a high-vegetable, fruit and fiber, low-fat diet</a> . <i>Eur J Nutr.</i> 2005 Feb; 44 (1): 18-25. Epub 2004 Mar 5. PMID: 15309460.	Participants were women who had been treated for breast cancer.
Tobias M, Turley M, Stefanogiannis N, Vander Hoorn S, Lawes C, Mhurchu CN, Rodgers A. <a href="#">Vegetable and fruit intake and mortality from chronic disease in New Zealand</a> . <i>Aust N Z J Public Health.</i> 2006 Feb; 30 (1): 26-31. PMID: 16502948.	Does not answer question: Does not examine relationship between vegetable and fruit intake and disease.
Tohill BC, Seymour J, Serdula M, Kettel-Khan L, Rolls BJ. <a href="#">What epidemiologic studies tell us about the relationship between fruit and vegetable consumption and body weight</a> . <i>Nutr Rev.</i> 2004 Oct; 62 (10): 365-374. Review. PMID: 15508906.	Study design is narrative review.
Traka M, Gasper AV, Melchini A, Bacon JR, Needs PW, Frost V, Chantry A, Jones AM, Ortori CA, Barrett DA, Ball RY, Mills RD, Mithen RF. <a href="#">Broccoli consumption interacts with GSTM1 to perturb oncogenic signaling pathways in the prostate</a> . <i>PLoS One.</i> 2008 Jul 2; 3 (7): e2568. PMID: 18596959; PMCID: PMC2430620.	Does not answer question: Does not include outcome of interest.
Tsubono Y, Otani T, Kobayashi M, Yamamoto S, Sobue T, Tsugane S; JPHC Study Group. <a href="#">No association between fruit or vegetable consumption and the risk of colorectal cancer in Japan</a> . <i>Br J Cancer.</i> 2005 May 9; 92 (9): 1, 782-1, 784. PMID: 15856039.	Cancer excluded as outcome of interest.
Turner F, Smith G, Sachse C, Lightfoot T, Garner RC, Wolf CR, Forman D, Bishop DT, Barrett JH. <a href="#">Vegetable, fruit and meat consumption and potential risk modifying genes in relation to colorectal cancer</a> . <i>Int J Cancer.</i> 2004 Nov 1; 112 (2): 259-264. PMID: 15352038.	Cancer excluded as outcome of interest.
van Dijk BA, Schouten LJ, Kiemeney LA, Goldbohm RA, van den Brandt PA. <a href="#">Vegetable and fruit consumption and risk of renal cell carcinoma: Results from the Netherlands cohort study</a> . <i>Int J Cancer.</i> 2005 Nov 20; 117 (4): 648-654. PMID: 15929109.	Cancer excluded as outcome of interest.
van Duijnhoven FJ, Bueno-De-Mesquita HB, Ferrari P, Jenab M, Boshuizen HC, Ros MM, Casagrande C, Tjønneland A, Olsen A, Overvad K, Thorlaciuss-Ussing O, Clavel-Chapelon F, Boutron-Ruault MC, Morois S, Kaaks R, Linseisen J, Boeing H, Nöthlings U, Trichopoulou A, Trichopoulos D, Misirli G, Palli D, Sieri S, Panico S, Tumino R, Vineis P, Peeters PH, van Gils CH, Ocké MC, Lund E, Engeset D, Skeie G, Suárez LR, González CA, Sánchez MJ, Dorronsoro M, Navarro C, Barricarte A, Berglund G, Manjer J, Hallmans G, Palmqvist R, Bingham SA, Khaw KT, Key TJ, Allen NE, Boffetta P, Slimani N, Rinaldi S, Gallo V, Norat T, Riboli E. <a href="#">Fruit, vegetables and colorectal cancer risk: The European Prospective Investigation into Cancer</a>	Cancer excluded as outcome of interest.

[and Nutrition](#). Am J Clin Nutr. 2009 May; 89 (5): 1, 441-1, 452. Epub 2009 Apr 1. PMID: 19339391.

van Gils CH, Peeters PH, Bueno-de-Mesquita HB, Boshuizen HC, Lahmann PH, Clavel-Chapelon F, Thiébaut A, Kesse E, Sieri S, Palli D, Tumino R, Panico S, Vineis P, Gonzalez CA, Ardanaz E, Sánchez MJ, Amiano P, Navarro C, Quirós JR, Key TJ, Allen N, Khaw KT, Bingham SA, Psaltopoulou T, Koliva M, Trichopoulou A, Nagel G, Linseisen J, Boeing H, Berglund G, Wrifält E, Hallmans G, Lenner P, Overvad K, Tjønneland A, Olsen A, Lund E, Engeset D, Alsaker E, Norat T, Kaaks R, Slimani N, Riboli E. [Consumption of vegetables and fruits and risk of breast cancer](#). JAMA. 2005 Jan 12; 293 (2): 183-193. PMID: 15644545.

Wakita Asano A, Miyoshi M, Arai Y, Yoshita K, Yamamoto S, Yoshiike N. [Association between vegetable intake and dietary quality in Japanese adults: A secondary analysis from the National Health and Nutrition Survey, 2003](#). J Nutr Sci Vitaminol (Tokyo). 2008 Oct; 54 (5): 384-391. PMID: 19001770.

Wang LI, Giovannucci EL, Hunter D, Neuberg D, Su L, Christiani DC. [Dietary intake of Cruciferous vegetables, Glutathione S-transferase \(GST\) polymorphisms and lung cancer risk in a Caucasian population](#). Cancer Causes Control. 2004 Dec; 15 (10): 977-985. PMID: 15801482.

Wark PA, Grubben MJ, Peters WH, Nagengast FM, Kampman E, Kok FJ, van 't Veer P. [Habitual consumption of fruits and vegetables: associations with human rectal glutathione S-transferase](#). Carcinogenesis. 2004 Nov; 25 (11): 135-2, 142. Epub 2004 Jul 29. PMID: 15284178.

Wark PA, Weijenberg MP, van 't Veer P, van Wijhe G, Lüchtenborg M, van Muijen GN, de Goeij AF, Goldbohm RA, van den Brandt PA. [Fruits, vegetables, and hMLH1 protein-deficient and -proficient colon cancer: The Netherlands cohort study](#). Cancer Epidemiol Biomarkers Prev. 2005 Jul; 14 (7): 1, 619-1, 625. PMID: 16030092.

Weikert S, Boeing H, Pischon T, Olsen A, Tjønneland A, Overvad K, Becker N, Linseisen J, Lahmann PH, Arvaniti A, Kassapa C, Trichopoulou A, Sieri S, Palli D, Tumino R, Vineis P, Panico S, van Gils CH, Peeters PH, Bueno-de-Mesquita HB, Büchner FL, Ljungberg B, Hallmans G, Berglund G, Wrifält E, Pera G, Dorronsoro M, Gurrea AB, Navarro C, Martinez C, Quirós JR, Allen N, Roddam A, Bingham S, Jenab M, Slimani N, Norat T, Riboli E. [Fruits and vegetables and renal cell carcinoma: findings from the European prospective investigation into cancer and nutrition \(EPIC\)](#). Int J Cancer. 2006 Jun 15; 118 (12): 3, 133-3, 139. PMID: 16425278.

Whybrow S, Harrison CL, Mayer C, James Stubbs R. [Effects of added fruits and vegetables on dietary intakes and body weight in Scottish adults](#). Br J Nutr. 2006 Mar; 95 (3): 496-503. PMID: 16512935.

Williams MT, Hord NG. [The role of dietary factors in cancer prevention: Beyond fruits and vegetables](#). Nutr Clin Pract. 2005 Aug; 20 (4): 451-459. Review. PMID: 16207684.

Wright ME, Park Y, Subar AF, Freedman ND, Albanes D, Hollenbeck A, Leitzmann MF, Schatzkin A. [Intakes of fruit, vegetables and specific botanical groups in relation to lung cancer risk in the NIH-AARP Diet and Health Study](#). Am J Epidemiol. 2008 Nov 1; 168 (9): 1, 024-1, 034. Epub 2008 Sep 12. PMID: 18791192; PMCID: PMC2631557.

Cancer excluded as outcome of interest.

Does not answer question: Does not examine the relationship between vegetables and fruits and health outcomes.

Cancer excluded as outcome of interest.

Does not answer question: Does not include outcome of interest.

Cancer excluded as outcome of interest.

Cancer excluded as outcome of interest.

Does not answer question: Includes supplements, not food, in analyses.

Study design is narrative review.

Cancer excluded as outcome of interest.

<p>Wu H, Dai Q, Shrubsole MJ, Ness RM, Schlundt D, Smalley WE, Chen H, Li M, Shyr Y, Zheng W. <a href="#">Fruit and vegetable intakes are associated with lower risk of colorectal adenomas</a>. <i>J Nutr.</i> 2009 Feb; 139 (2): 340-344. Epub 2008 Dec 17. PMID: 19091801; PMCID: PMC2646202.</p>	<p>Cancer excluded as outcome of interest.</p>
<p>Yamaji T, Inoue M, Sasazuki S, Iwasaki M, Kurahashi N, Shimazu T, Tsugane S; Japan Public Health Center-based Prospective Study Group. <a href="#">Fruit and vegetable consumption and squamous cell carcinoma of the esophagus in Japan: The JPHC study</a>. <i>Int J Cancer.</i> 2008 Oct 15; 123 (8): 1, 935-1, 940. PMID: 18688852.</p>	<p>Cancer excluded as outcome of interest.</p>
<p>Yeh M, Moysich KB, Jayaprakash V, Rodabaugh KJ, Graham S, Brasuer JR, McCann SE. <a href="#">Higher intakes of vegetables and vegetable-related nutrients are associated with lower endometrial cancer risks</a>. <i>J Nutr.</i> 2009 Feb; 139 (2): 317-322. Epub 2008 Dec 11. PMID: 19074206.</p>	<p>Cancer excluded as outcome of interest.</p>
<p>Zhang CX, Ho SC, Chen YM, Fu JH, Cheng SZ, Lin FY. <a href="#">Greater vegetable and fruit intake is associated with a lower risk of breast cancer among Chinese women</a>. <i>Int J Cancer.</i> 2009 Jul 1; 125 (1): 181-188. PMID: 19358284.</p>	<p>Cancer excluded as outcome of interest.</p>